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### THE NATIONAL GEOGRAPHIC SOCIETY

(The National Geographic Society is a scientific and educational Society, wholly altruistic, incorporated under the Federal law as a non-commercial institution for the increase of geographic knowledge and its popular diffusion.)

General Headquarters, Washington, D. C.

## Contents for Week of December 22, 1930. Vol. IX. No. 23.

1. Burma Emerging as a Country.

2. Changing the Plant Geography of the United States.

3. Christmas in Many Lands.

- 4. Lisbon: Winter Quarters for the DO-X.
- 5. Who's Who among the Winds.



© Photograph from B. F. Wilhamson CHINESE TUNG NUTS GROWING IN FLORIDA

(See Bulletin No. 2).

#### HOW TEACHERS MAY OBTAIN THE BULLETINS

The Geographic News Bulletins are published weekly throughout the school year (thirty issues) and will be mailed to teachers for one year upon receipt of 25 cents (in stamps or money order). Entered as second-class matter, January 27, 1922, at the Post Office at Washington, D. C., under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized February 9, 1922.

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## Burma Emerging as a Country

BURMA is celebrating its prospective separation from India.

A Constitution and a place in England's family of self-governing dominions are now being asked by this great eastern province, the land of pagodas and of the Chaulmoogra tree, as a result of the separation agreed upon at the recent congress on Indian affairs held in London.

#### "Irish of the Orient"

The Burmese have a wholesomeness and a happy outlook on life that has earned them the title, "Irish of the Orient." The cleanliness and love of color and fine clothing mark even the poorest of the Burmese.

Women are not secluded. They work and play and worship side by side with the men. Men and women wear practically the same kinds of clothing—a loose, knicker-like garment below the waist, a kind of jacket above. Most of the trading

is carried on by women.

Burma, almost as big as Texas, and with a population of 13,200,000, is in many ways distinct from the India with which it has been grouped for years. Once outside of the triangular tourist's path (see map, page 2), bounded by Rangoon, Mandalay, and Prome (none of which is typically Burmese), one may journey at will among a simple, happy, kindly people, still very young and wholly unspoiled by contact with the West.

## Land of Mystery

It is a country of mystery. Superstitious natives believe that nats (nature spirits) still dwell in mountains, trees, streams and temples.

Burma is a land inhabited by many tribes, living as they lived 1,000 years ago; tribes among which the Burmese are only one, but the one which happened

to be in the ascendant when England conquered the country in 1826.

Much of the country may be reached by the Irrawaddy River, Kipling's "Road to Mandalay," and its branches. For such a journey only a single servant is needed, as in remote parts of India or Ceylon. For more extended journeys a bedding outfit, as well as cooking utensils and supplies, must be carried. The Burmese have not reached the stage of development requiring hotels, hence there are no Burmese hotels.

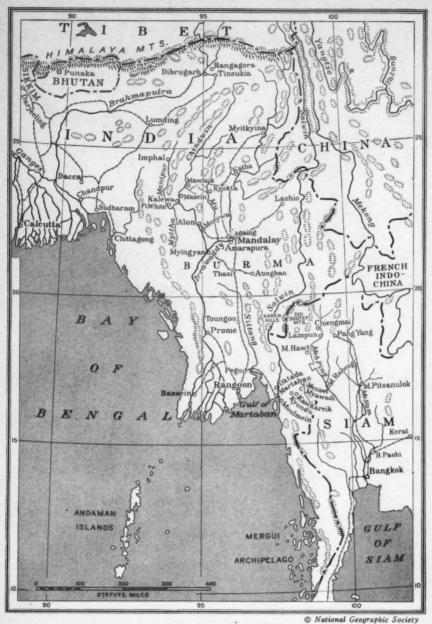
#### Cure for Leprosy

"Chaulmoogra" was, until a few years ago, a tree name known only to foresters. Until a few years ago only the seeds, sold by natives, were known. Then the U. S. Department of Agriculture sent Dr. Joseph F. Rock to the mountain forests of northern Burma to find the Chaulmoogra tree. Along the upper reaches of the Chindwin River he found it, and medical science passed another milestone. For the oil derived from the seeds of the Chaulmoogra tree has proved to be a treatment for the dread leprosy.

Rangoon, the principal city and seaport of Burma, has a population almost as great as that of Indianapolis. It is the fifth city in size in India. It is a cosmopolitan city, so much so that one may land in it and see little of Burmese life until he has penetrated far from the waterfront. Thousands of Hindus, Singalese, Chinese and Japanese have moved to the city and are engaged largely in the

commercial activities of the port.

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A SKETCH MAP OF BURMA, HOME OF THE CHAULMOOGRA TREE

Burma, the largest province of India, has been offered independence from the Empire to the west of it as a result of the recent London congress on Indian affairs. This prospective new division of the British family of nations is about the size of Texas and has a population of 13,-200,000. Here Dr. Joseph F. Rock found the Chaulmoogra tree, whose seeds yield an oil which is used in treatment of the dread leprosy (See Bulletin No. 2).

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## Changing the Plant Geography of the United States

D.R. DAVID FAIRCHILD, botanist and agriculture explorer, has been awarded the George Robert White medal, highest horticultural award in America, bestowed by the Massachusetts Horticultural Society, oldest society of its kind in the United States.

Thirty-three years ago, Dr. Fairchild organized the work in the Department of Agriculture which, crystallized in the Office of Foreign Plant Introduction, has introduced into the United States more than 80,000 species and varieties of useful plants, adding to the beauty of the public parks and private gardens from coast to coast, and enhancing the value of farm products by millions of dollars annually.

### Pilgrims Found Corn "Fair and Good"

From the days of the Pilgrims, America's first plant explorers, who found "Indian baskets, filled with corn, some whereof was in ears, fair and good, of divers colors," until to-day when any train or airplane ride or walk through city parks or countryside reveals immigrant plant life, the plant geography of the United States has been vastly and continually changed.

But it was not until the young man from one of the country's first great agricultural colleges, that of the State of Kansas, became identified with the Department of Agriculture, in Washington, and was called upon by Secretary James Wilson to organize the work of foreign plant introduction that the Government engaged, systematically and scientifically, in economic agriculture.

## Jungles and Deserts Sources of Valuable Crops

Dr. Fairchild first searched for new plants as an agricultural explorer attached to the expeditions of Barbour Lathrop. Then, and since, he and his associates have penetrated jungles, marshes and deserts, to discover plants which would yield new food and fruits for the American table, raw materials for American factories, or add new color and form to our gardens.

In 1906, after eight years of foreign exploration, he resumed charge of the Office of Foreign Plant Introduction, an office which has engaged in one of the most adventurous, romantic and useful tasks of any government bureau. He now is attached to it as a special agricultural explorer, with his office in Washington, and a winter home in Coconut Grove, Florida, where in the large Federal Plant Introduction Garden, and in his own private garden, he experiments with the many useful, exotic tropical plants, shrubs, trees and flowers he collected on his pilgrimages to distant parts of the earth.

### Some Magellans of Plant Exploration

Under his supervision or with his cooperation more than thirty expeditions have been sent out, with such explorers as Frank Meyer, T. H. Kearney, W. T. Swingle, Mark Carleton, Joseph F. Rock, Neils Hansen, Wilson Popenoe and P. H. Dorsett as leaders. They have brought back plants, shrubs, trees, vegetables, grains and forage crops which have beautified or made more valuable hundreds of thousands of acres of gardens, parks and farm lands of the country.

Among these introductions were the dry land elm, brought by Meyer from China, now thriving from Louisiana to the Canadian border; superior varieties of the Chinese and Japanese persimmons, once a curiosity, now frequent on

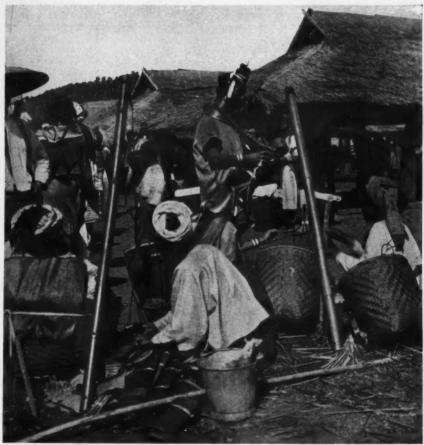
Bulletin No. 2, December 22, 1930 (over)

## The Great Shrine of Shwe Dagon

The outstanding feature of Rangoon, and the finest building in all Burma, is the Shwe Dagon, the great towering Buddhist shrine whose pinnacle was shaken down by an earthquake last spring. It stands on a low green hill bowered in grateful shade. Before the earthquake shook off its topmost ornaments, the shrine consisted of a gracefully tapering spire, gilded over all and surmounted by a hti, or umbrella, of skillfully wrought and gilded metal. Hung on this hti was a chime of bells which was tinkled by the gentlest breeze.

#### Bulletin No. 1, December 22, 1930.

The life and customs of Burma are described and illustrated in "Among the Hill Tribes of Burma," National Geographic Magazine, March, 1922; "Hunting the Chaulmoogra Tree," March, 1922; "Untoured Burma," July, 1913; "Notes on Burma," October, 1909.



@ National Geographic Society

#### WOMEN MAKING PURCHASES IN THE KAWNG-I BAZAAR: BURMA

Housewives of the Karen Hills (see map, page 2) stocking the family larder. The ring at the back of the neck is more clearly seen on the woman sitting down. The "well-dressed" Karen woman wears as much as 50 or 60 pounds of brass rings on neck, arms, and legs.

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## Christmas in Many Lands

C HRISTMAS is the most nearly universal of holidays. Wherever the flags of Christian nations wave, and this includes more than half the globe, business activity halts.

In preparation for the greatest of our holidays, housewives and shoppers are

busy this week in many lands.

While the people of other countries do not exchange as many gifts as do Americans, the Christmas dinner basket is as heavily laden in Melbourne, Madrid and Oslo as it is in Miami, Minneapolis and Los Angeles.

## An Eating Day

A visitor from Mars might receive the impression that Christmas is Earth's

day devoted to eating.

In England, home of many of our food treats, the plum pudding still is the climax of the Christmas dinner. Piping hot, it is carried into the dining room at the end of the meal, burning brandy flames licking the sprig of holly that always adorns its rounded top.

Proud English cooks devote more time to purchasing pudding ingredients

than they do to any other part of the dinner.

Goose, once the English pièce de resistance, has been supplanted in many English homes by the American turkey, although goose is still popular. Potatoes, sprouts, Cheddar, Cheshire and Stilton cheese, spices, fruit, wines and sauces fill the rest of the market basket.

#### Spanish Markets

Spanish markets present a bewildering selection of good things. Gaily decorated shops offer nuts from Granada, fresh dates from Tangier, luscious oranges from Andalusia, and long sausages tied in bright ribbons. Turkeys for sale "on the hoof" are driven through the streets by peasants from the country. Toy peddlers call their wares from door to door.

Spanish children, however, must wait until the Feast of the Three Kings, in January, to receive their "Christmas presents." Christmas dinner in Spain consists of almond soup, truffled turkey with roasted chestnuts, and Spanish sweetmeats and chocolate. Odors of dishes fried in vegetable oil, saffron and garlic

fill the narrow streets.

#### Christmas a Business

Christmas is a "business" in the mountains of Germany. All year the peasants of the rural districts carve wooden animals, which, with the mechanical toys of German industrial towns, go forth to gladden the hearts of the world's youth. But Germany keeps plenty for its own children, and, with the bulging market basket, the German parent always brings home an arm-load of toys for the Christmas tree.

In Paris the "reveillon," or Christmas Eve supper, is the gayest Yuletide event. Overindulgence in it may account for the general air of gloom that overhangs the Parisian Christmas Day. Oysters and écrevisse, a tasty crawfish, make up the first course. After that there are many courses, each taken in a different restaurant, each accompanied by a different kind of wine. A cup of coffee at

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American market stalls; the popular sorts of the avocado (Alligator Pear) which Popenoe found after two years' search among the mountains of Guatemala; the Pistache nut of the Levant, and the soy bean of the Orient, now grown on three million acres of land all over the United States.

The Office of Foreign Plant Introduction under Dr. Fairchild's direction has accumulated the most extensive collection of original field descriptions of useful crop plants in existence, the largest seed collection of economic plant species, and the greatest collection of photographs of useful plants in the world.

### "Americanizing" Sorghum, Dates and Bamboo

Of the plants which Dr. Fairchild personally collected, one of the most important is probably the Feterita sorghum from the Sudan, an important grain and forage crop for Arizona and California, several million dollars' worth of which are now being grown annually.

He also brought in the Persian Gulf dates from Baghdad and the tung oil tree introduction from China, whose nuts furnish the "wood oil" of the paint

and varnish industry (See illustration, page 1).

It is largely through the initiative of Dr. Fairchild that groves of the Oriental Bamboo have been established in America.

#### Tropic Climes Yield Valuable Raw Materials

More and more do industry, medicine, and food purveyors look to the Tropics for sources of supply—such tropical crops as rubber, which makes possible the automobile; quinine, which is man's first line of defense against malaria; chaulmoogra oil, for treating leprosy; and coffee, which is to Brazil what cotton is to our Southern States. Therefore, in recent years Dr. Fairchild and his associates have explored into the more remote tropic jungles and forests. His quest for new plants has led him through the Dutch East Indies and the South Sea Isles, into Siam, Burma, New Guinea and Ceylon, along the border land of the Persian Gulf, and has extended, in southern latitudes, to the interiors of New Zealand and Australia.

Dr. Fairchild is a trustee of the National Geographic Society, medalist of the French Societe d'Acclimatation, a member of numerous botanical and other learned societies in this country and abroad, and he has written "The Book of Monsters," contributed many technical papers to scientific periodicals, and is

author of the recent book, "Exploring for Plants."

#### Bulletin No. 2, December 22, 1930.

Note: Supplementary reading helpful to students preparing essays on our immigrant plants can be found in "Florida. the Fountain of Youth." National Geographic Magasine, January, 1930; "Hunting the Chaulmoogra Tree," March, 1922; "Experiences of a Lone Geographer," September, 1925; "Our Plant Immigrants," April, 1906; "A Hunter of Plants," July, 1919; "Into Primeval Papua by Seaplane, Seeking Disease-Resisting Sugar Cane," September, 1929.

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## Lisbon: Winter Quarters for the DO-X

THE DO-X, largest airplane in the world, has been forced to go into winter quarters at Lisbon, the point chosen for its take-off from the mainland of Europe. A fire, which consumed one of the wings of the craft, resulted in temporary abandonment of the huge craft's transatlantic flight.

Arrival of the giant seaplane at Lisbon recalls that America's NC-4 landed

there after the first successful flight across the Atlantic in 1919.

Then the Lisbonese hailed the transatlantic flyer, Commander Read, as a second Vasco da Gama for blazing an air route to the New World with Lisbon as the natural jumping off place.

#### Harbor a Maritime Panorama

Seaplanes seem a bit out of place when landing in the swift Tagus River, Lisbon's port. The scurrying of many small craft unfolds a panorama of Portugal's history. An ancient Phoenician vessel with curious upturned stem, in reality only another Portuguese fishing smack, cuts disdainfully across the bow of a sleek incoming liner. Flat, oar-propelled boats noticeably like Roman galleys glide swiftly along with the ten-knot current.

Dumpy craft remind one of Spain's mighty Armada, whose gay, high-pooped galleons and caravels gathered here before swarming out to be scattered and destroyed by England's Drake. Over there is a black derelict, once a proud clipper

ship, the fastest thing afloat, now only a coal hulk.

Lisbon's natural setting on eleven hills and its man-made edifices make it one of the most beautiful cities of the world. Approaching by its front door, the sea, it is hard to believe that most of this vast pile of terraced buildings, from lordly palace to humble tenement, was erected after the terrible earthquake of 1755. Followed by fire and giant tidal wave, that national disaster laid waste the city and killed from 30,000 to 40,000 people.

## Crossroads of Steamship Lanes

Sailing up the river, a crossroads of ocean steamship lanes, visitors see first the white Tower of Belem. Built soon after Da Gama's discovery of the sea route to India, this stronghold, with small Indian turrets at each corner, has been Lisbon's gateway for 400 years.

Passengers land in small boats from steamers anchored off the landing stage, which is always choked with sardine bateaux, or skiffs. Climbing a short flight

of steps, they literally jump into Portugal with both feet.

Black Horse Square, as sailors familiarly call this landing place, known to natives as Praca do Commercio, is to Lisbon what the new Arlington Memorial Bridge will be to Washington, D. C. It is the state entrance to Lisbon.

## Newsboys Also Lottery Agents

Barefoot fisherwomen in dark dresses and gay handkerchiefs parade by with flat baskets of fish on their heads and newsboys call out in musical notes the latest edition, or cry "To-morrow the wheel turns" to sell lottery tickets.

Passing under a towering memorial arch, one enters Rua Augusta, a modern street bustling with quaint contrasts in traffic. Street cars and automobiles mingle with long-horned oxen bearing huge carved wooden yokes, which seem heavier than

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home at breakfast time generally ends the celebration. Les Halles (market) resemble a busy American department store the week before Christmas—crowds of buyers jostling peasants in smocks from the country.

### Gingerbread Goats and Pigs

Sweden has special Christmas markets in which, by ancient custom, peasants may sell their wares in the public squares. Most picturesque are the booths in which gingerbread cookies are sold. Every Swedish Christmas tree must have its gingerbread Julbocken (Yule goats) and Julgrisen (Yule pigs).

These little cakes are reminders of the old days when the Thunder God Thor's goats and the Sun God Frey's pigs were sacred. For Christmas dinner the three chief Swedish dainties are lusk-fish, prepared by heating the fish for several days in wood ashes, rice sweetened and flavored with cinnamon, and roast goose.

Mexicans do not have a Christmas tree, but Mexican parents search the markets for little trinkets, sweets, nuts, and toys for the Pinate—bowl-shaped jars made of coarse, red earthenware. The jars are hung from the ceiling on cords. On Christmas day the children of the household, blindfolded, try to strike them with sticks. The Pinates are made to break easily; a mere touch usually showers the lucky youngster with gifts.

### Where Christmas Is a Midsummer Holiday

South of the Equator Christmas is a summer holiday. Ice stalls, provided with chairs and benches, attract crowds of perspiring pleasure-seekers in Argentina, Brazil and Chile.

In Lima, Peru, the streets take on the appearance of a carnival, with much gay laughter, jostling crowds, and playing of guitars and castanets. On Christmas morning markets are held in the principal plazas of the towns. Gay red peppers, fowl, pigs, nuts, and other edibles are displayed on straw mats spread on the ground.

Christmas was hot but enjoyable at the National Geographic Society Observatory in desert South West Africa two years ago. Ice cream from the Observatory refrigerator was the most popular dish when the temperature was hovering around 100 degrees in the shade.

#### Bulletin No. 3, December 22, 1930.

See also "Bethlehem and the Christmas Story," National Geographic Magasine, December, 1929; "Keeping House for the 'Shepherds of the Sun,'" April, 1930.

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## Who's Who among the Winds

THE city of Paris, France, was the victim of a freak storm recently. Pedestrians, automobiles and roof tops were powdered with fine sand. Rain which followed almost immediately left a trail of mud across the northern part of the city. Weather experts said the sand had been carried across the Mediterranean Sea and southern France from the Sahara desert.

There are many kinds of winds. Here are a few of those most commonly

mentioned in the day's news:

Gale: A strong, straight wind.

Whirlwind: An eddy of air which whisks up dust; or a stronger whirl of air such as that which strips leaves from a cornfield and sends them hundreds of feet aloft.

Tornado: A violent, powerful whirlwind, covering a small area, that sucks up heavy objects, or twists them from their moorings. Its vertical forces are more

important than its horizontal ones.

Hurricane: A violent circular system of winds in the Tropics and semi-Tropics of the Atlantic and Caribbean, covering a considerable area and moving long distances. These are the strongest of the horizontal winds. They are sucked toward a great central vortex. One hundred miles an hour is their usual maximum toward the center of circulation.

Typhoon: A hurricane in the tropical waters of the Pacific. Waterspout: A tornado or violent whirlwind over water.

Cyclone: A continually misused term. In popular parlance any destructive wind is a "cyclone." Properly, a cyclone is a circular system of winds covering a great area (sometimes 1,000 miles across) and including gentle breezes as well as stiff winds. Cyclones are beneficial rather than harmful. They give us most of our weather changes. Each "low" on the daily weather map has its cyclonic system of winds circulating around it. When Nature dips her spoon in the weather brew and stirs, the result is a cyclone.

Clouds, winds, and other aspects of our weather are described in "Toilers of the Sky," August, 1925, National Geographic Magasine.

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the loads the animals are hauling. Donkeys, with baskets containing vegetables, fruit, kerosene tins, chickens and water, trot along, oblivious to the noise. Sometimes women wearing odd, round, flat hats called "Coronas" ride sideways on these tiny beasts.

#### Old Structures Have Oriental Touch

Ever in the background the visitor notices traces of Lisbon's past glory. In one section, where the earthquake was less damaging, Moorish palaces and buildings a thousand years old still stand. Streets so narrow that a man's outstretched arms touch both side walls and pedestrians jump into doorways to miss being struck by a fast-moving street car lead steeply down to the Tagus. During winter's rainy season, green grass grows in furrows on the roofs of houses, only to disappear on the approach of the hot, dry summer.

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For additional data about Lisbon see "Pathfinder of the East," November, 1927; "Lisbon, City of the Friendly Bay," November, 1922; and other articles in the National Geographic Magazine, which can be found in your public library or school library by consulting "The Cumulative Index" to The Geographic.



@ U. S. Navy Official Photograph

#### AMERICAN SAILORS IN LISBON'S GATEWAY PLAZA

The equestrian statue gives to this famous plaza the name of "Black Horse Square." The triumphal arch in the background leads from the Praca do Commercio to the Cidade Baixa. These sailors were on patrol in Lisbon when the world-renowned NC-4 reached that city after her flight across the Atlantic.

#### A NOTEWORTHY CONTRIBUTION TO TEACHING

Requests are being made daily for back copies of the NATIONAL GEOGRAPHIC MAGAZINE for use in schools. Many educators have urged that earlier copies of The Geographic be made available for teaching and reference. Illustrations, articles and maps make each issue of The Geographic of permanent value for classrooms and school libraries.

The Society has collected, with the co-operation of its membership, a limited number of copies of special value to schools, which will be delivered to schools upon requisition of the superintendent or principal. It is desired that these sets be allotted to schools in rural areas or smaller towns, where library facilities are limited.

The recipient need pay only the cost of handling and carriage, which amounts to 50 cents for each packet of ten copies of The Geographic.

Because these packages must be assembled from a wide assortment of earlier copies, many of the numbers available being limited, it will not be possible to specify which issues the packets contain. Each of the ten copies will be a different issue. Thus each packet is a panorama of world geography, including also Nature subjects, exploration narratives, and popular science—in other words a geography library of some 35 authoritative articles with more than 1,000 illustrations, many in color.

You will recognize the value of this gift, arranged as a phase of the educational work of The Society, when it is considered that all back copies available at The Society's headquarters for membership demands are priced at 50 cents each; 75 cents if earlier than 1912. Many out-of-print issues command much higher sums from rare-book dealers.

To minimize bookkeeping, remittance of 50 cents for each packet must accompany the order; and teachers must indicate plainly their school and teaching position because these copies are made available only for schools.

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